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EXAMINER

LIGHTFOOT, ELENA TSOY

ART UNIT	PAPER NUMBER
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1715

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Advisory Action

The Request for Reconsideration filed on June 30, 2011 under 37 CFR 1.116 in reply to the final rejection has been considered but is not deemed to place the application in condition for allowance for the reasons of record set forth in the Final Office Action mailed on 4/7/2011.

Response to Arguments

Applicant's arguments filed on June 30, 2011 have been fully considered but they are not persuasive.

Interview Summary

(A) Applicants disagree with the Examiner's position that based on the disclosure of paragraph 46 of Nun, other hydrophobizing agents can be used. Further, there is no disclosure of the claimed cocondensates.

The Examiner respectfully disagrees with this argument. The paragraph 46 of Nun does read on hydrophobizing agents other than alkylsilanes, alkylsilazanes, or perfluoroalkylsilanes for at least the reason that Nun teaches in the paragraph 34 that the particles for generating the self-cleaning surfaces may themselves be hydrophobic, e.g. particles comprising **PTFE**, or the particles used may have been hydrophobicized. Since PTFE could not possibly be formed from alkylsilanes, alkylsilazanes, or perfluoroalkylsilanes described in the paragraph 46 of Nun, Nun is clearly not limited to alkylsilanes, alkylsilazanes, or perfluoroalkylsilanes. Thus, the Examiner's position that *any* hydrophobicizing agent can be used is *correct*.

(B) Applicants submit that Inokuchi does not disclose any cocondensates as claimed either. All that this reference discloses is mixture of alkoxysilanes (co. 3, ln. 19-24). Jenkner, at paragraph 6, describes some state of the art in which a substrate surface may be covered with

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SiO₂ particles and then coated with fluoroalkyltrialkoxysilanes. In contrast to the conventional methods, Jenkner wants to use certain pre-treatment methods (see paragraph 15). Thus, Jenkner does not disclose or provide any motivation or suggestion to cover a surface with microparticles as claimed and then coat with a cocondensate as claimed. In fact, Jenkner teaches away from doing this as Jenkner requires physical pre-treatment such as corona discharging, flaming, glow, discharge etc. (paragraph 15).

The Examiner respectfully disagrees with this argument. As was explained to Applicants at the interview, hydrophobic properties of the composition depend on the composition itself and do not depend on the substrate to which it is applied. Adhesion strength of a coating may depend on the substrate but certainly not hydrophobic properties. One of ordinary skill in the art would have reasonable expectation of success in achieving self-cleaning properties by using Dynasilan 8810 in Nun instead of Dynasilan 8262 since Jenkner et al teaches that either tridecafluorooctyltriethoxysilane (Dynasilan 8262) or an *oligomerized cocondensate* of tridecafluorooctyltriethoxysilane and 3-aminopropyltriethoxysilane (Dynasilan 8810) may be used for providing hydrophobic, oleophobic and dirt repellent coatings on metal oxide surfaces.

Additional comments in reply to issues raised during the interview

In reply to the Examiner's conclusion that Dynasilane 8262 and 8810 are equivalent, the Examiner's attention is drawn to the Examples of Jenkner. A comparison can be made between Dynasilane 8262 and 8810 for a PMMA substrate. The advancing angles for both are different (see table 1 and 2 for PMMA substrates), evidencing that Dynasilane 8262 and 8810 are NOT equivalent. In addition, Nun and Jenkner are in a different field of endeavor because they do not deal with the obtaining of surfaces that have lactophobic properties. They try to solve different problems. Nun wants to provide self-cleaning surfaces [0011] and Jenkner wants to provide hydrophobic and oleophobic coatings [0014]. Thus, Nun and Jenkner are non-analogous art. See *In re Klein* (Fed. Cir. June 6, 2011).

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The Examiner respectfully disagrees with this argument. First of all, results displayed in table 1 and 2 for PMMA substrates of Jenkner are irrelevant to Nun because *any* hydrophobocizing composition is suitable for forming self-cleaning surface.

Second, in contrast to Applicants' assertion, Nun and Jenkner are in the same field of endeavor, since they are both in the field of *hydrophobocizing* a substrate surface. Note that Nun wants to provide self-cleaning surfaces [0011] by providing hydrophobic coatings just like Jenkner wants to provide hydrophobic and oleophobic coatings [0014].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELENA T. LIGHTFOOT whose telephone number is (571)272-1429. The examiner can normally be reached on Monday-Friday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy Lightfoot, Ph.D.
Primary Examiner
Art Unit 1715

July 8, 2011

/Elena Tsoy Lightfoot/